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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 4

Application Number	Continuation of Application No. 09/898,132
Filing Date	July 3, 2001
First Named Inventor	Abbott, Nicholas
Group Art Unit	1627
Examiner Name	Celsa, B.
Attorney Docket Number	2307Z-085840US

PTO
10/044899



U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
JL	AA	4,513,034A		Sparer	04/23/85	
	AB	4,597,942		Meathrel, W. G.	07/01/86	
	AC	4,902,106A		Dijon	02/20/90	
	AD	5,071,526		Pletcher <i>et al.</i>	12/10/91	
	AE	5,130,828		Ferguson, J.L.	07/14/92	
	AF	5,618,493		Goldstein <i>et al.</i>	04/08/97	
	AG	5,658,491A		Kistner	08/19/97	
JL	AH	5,677,195A		Winkler <i>et al.</i>	10/14/97	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
JL	AI	PCT	WO 94/03496 A		Csiro	02/17/94		<input type="checkbox"/>
	AJ	PCT	WO 97/32202 A		University of Leeds	09/04/97		<input type="checkbox"/>
	AK	PCT	WO 97/33737 A		Harvard College	09/18/97		<input type="checkbox"/>
	AL	PCT	WO 97/35198 A		Ontogen	09/25/97		<input type="checkbox"/>
JL	AM	PCT	WO 98/04652 A		US Naval Research	02/05/98		<input type="checkbox"/>

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/Jeffrey Lundgren/

Date
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Examiner Name	Celsa, B.
Attorney Docket Number	023072-U85840US

Sheet 2 of 4

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Exami ner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JL	AN	Bain, C.D., <i>et al.</i> , "Formation of Monolayers by the Coadsorption of Thiols on Gold: Variation in the Length of the Alkyl Chain," <i>J. Am. Chem. Soc.</i> , 111:7164-7175 (1989)	<input type="checkbox"/>
	AO	Charych, D., <i>et al.</i> , "A 'litmus test' for molecular recognition using artificial membranes," <i>Chemistry & Biology</i> 3(2):113-120 (1996)	<input type="checkbox"/>
	AP	Charych, D.H., <i>et al.</i> , "Direct Colorimetric Detection of a Receptor-Ligand Interaction by a Polymerized Bilayer Assembly," <i>Science</i> 261:585-588 (1993)	<input type="checkbox"/>
	AQ	Cognard, J., "Alignment of Nematic Liquid Crystals and Their Mixtures," <i>Mol. Cryst. Liq. Cryst.</i> , 1:1-74 (1982)	<input type="checkbox"/>
	AR	Drawhorn, R.A., <i>et al.</i> , "Anchoring of Nematic Liquid Crystals on Self-Assembled Monolayers Formed from Alkanethiols on Semitransparent Films of Gold," <i>J. Phys. Chem.</i> , 99(45):11-16515 (1995)	<input type="checkbox"/>
	AS	Frey, B.L., <i>et al.</i> , "Covalent Attachment and Derivatization of Poly(L-lysine) Monolayers on Gold Surfaces As Characterized by Polarization-Modulation FT-IR Spectroscopy," <i>Analytical Chemistry</i> 68(18):3187-3193 (1996)	<input type="checkbox"/>
	AT	Gupta, V.K., <i>et al.</i> , "Design of Surfaces for Patterned Alignment of Liquid Crystals on Planar and Curved Substrates," <i>Science</i> 276:1533-1536 (1997)	<input type="checkbox"/>
	AU	Gupta, V.K., <i>et al.</i> , "Optical Amplification of Ligand-Receptor Binding Using Liquid Crystals," <i>Science</i> 279(5359):2077-2080 (3/27/98)	
	AV	Gupta, V.K., <i>et al.</i> , "Uniform Anchoring of Nematic Liquid Crystals on Self-Assembled Monolayers Formed from Alkanethiols on Obliquely Deposited Films of Gold," <i>Langmuir</i> 12:2587-2593 (1996)	<input type="checkbox"/>
	AW	Hickman, J.J., <i>et al.</i> , "Rational pattern design for in vitro cellular networks using surface photochemistry," <i>J. Vac. Sci. Technol.</i> , 12(3):607-16 (1994)	<input type="checkbox"/>
	AX	Hiltrop, J.K., <i>et al.</i> , "On the Alignment of Thermotropic Nematic and Smectic Liquid Crystals on Lecithin Coated Surfaces," <i>Ber. Bunsenges. Phys. Chem.</i> , 98(2):209-213 (1994)	<input type="checkbox"/>
	AY	Jackman, R.J., <i>et al.</i> , "Fabrication of Submicrometer Features on Curved Substrates by Microcontact Printing," <i>Science</i> , 269:664-665 (1995)	<input type="checkbox"/>
JL	AZ	Jerome, B., "Surface effects and anchoring in liquid crystals," <i>Rep. Prog. Phys.</i> 54:391-451 (1991)	<input type="checkbox"/>

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/Jeffrey Lundgren/

Date
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Complete if Known

Application Number	Continuation of Application No. 09/898,132
Filing Date	July 3, 2001
First Named Inventor	Abbott, Nicholas
Group Art Unit	1627
Examiner Name	Celsa, B.

Sheet 3 of 4 Attorney Docket Number 023072-08584005

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Exami ner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AAA	Kim, T., "Polymeric Self-Assembled Monolayers. 5. Synthesis and Characterization of ω -Functionalized, Self-Assembled Diacetylenic and Polydiacetylenic Monolayers," <i>Langmuir</i> 12:6065-6073 (1996)	<input type="checkbox"/>
	ABB	Kumar, A., <i>et al.</i> , "Patterned Self-Assembled Monolayers and Meso-Scale Phenomena," <i>Acc. Chem. Res.</i> , 28:219-226 (1995)	<input type="checkbox"/>
	ACC	Lenk, T.J., <i>et al.</i> , "Structural Investigation of Molecular Organization in Self-Assembled Monolayers of a Semifluorinated Amidethiol," <i>Langmuir</i> 10(12):4610-4617 (12/94)	
	ADD	Miller, W.J., <i>et al.</i> , "Planar Anchoring of Nematic 5CB on Self-Assembled Monolayers Formed From Alkanethiols on Gold," <i>Applied Physics Letters</i> 69(13):1852-1854 (09/23/96)	
	AEE	Mrksich, M., <i>et al.</i> , "Using Self-Assembled Monolayers to Understand the Interactions of Man-Made Surfaces with Proteins and Cells," <i>Annu. Rev. Biophys. Biomol. Struct.</i> , 25:55-78 (1996)	<input type="checkbox"/>
	AFF	Pan, J.J., <i>et al.</i> , "Molecular Recognition and Colorimetric Detection of Cholera Toxin by Poly(diacetylene) Liposomes Incorporating G _{m1} Ganglioside," <i>Langmuir</i> 13:1365-1367 (1997)	<input type="checkbox"/>
	AGG	Pozioemek, E.J., <i>et al.</i> , "Use of Liquid Crystals as Vapor Detectors," <i>Mol. Cryst. Liq. Cryst.</i> , 27(1-2):175-185 (5/1973)	<input type="checkbox"/>
	AHH	Proust, J.E., <i>et al.</i> , "Orientation of a Nematic Liquid Crystal by Suitable Boundary Surfaces," <i>Solid State Commun.</i> 11:1227-1230 (1972)	<input type="checkbox"/>
	AII	Spinke, J., <i>et al.</i> , "Molecular recognition at self-assembled monolayers: Optimization of surface functionalization," <i>J. Chem. Phys.</i> , 99(9):7012-7019 (1993)	<input type="checkbox"/>
	AJJ	Tarlov, M.J., <i>et al.</i> , "UV Photopatterning of Alkanethiolate Monolayers Self-Assembled on Gold and Silver," <i>J. Am. Chem. Soc.</i> , 115:5305 (1993)	<input type="checkbox"/>
	AKK	Wagner, P., <i>et al.</i> , "Covalent Immobilization of Native Biomolecules onto Au (111) via N-Hydroxysuccinimide Ester Functionalized Self-Assembled Monolayers for Scanning Probe Microscopy," <i>Biophysical Journal</i> , 70:2052-2066 (1996)	<input type="checkbox"/>
	ALL	Xia, Y., <i>et al.</i> , "Use of Controlled Reactive Spreading of Liquid Alkanethiol on the Surface of Gold To Modify the Size of Features Produced by Microcontact Printing," <i>J. Am. Chem. Soc.</i> , 117:3274-3275 (1995)	<input type="checkbox"/>

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Sheet 4 of 4

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	AMM	Yang, J.Y., <i>et al.</i> , "Binary self-assembled monolayers: spectroscopy and application to liquid crystal alignment," Masuhara <i>et al.</i> , Eds.; <i>Microchemistry</i> , North-Holland, Amsterdam, 1994, p.441	<input type="checkbox"/>

Examiner Signature	/Jeffrey Lundgren/	Date Considered	02/20/2007
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